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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------------|------------------|
| 09/989,682 | 11/20/2001 | Raymond Clarke | 13282-2 | 9733 |
| 7590 03/31/2004 | | | | |
| Sheldon & Mak Suite 900 225 South Lake Avenue Pasadena, CA 91101 | | | EXAMINER WEINSTEIN, STEVEN L | |
| | | | ART UNIT 1761 | PAPER NUMBER |

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 09/989,682 | Applicant(s) CLARKE, RAYMOND | |
| | Examiner Steven L. Weinstein | Art Unit 1761 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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It is first noted that the second instance of "A" in claim 1 should probably read "B".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cummin et al (3,798,333) in view of applicant's admission of the prior art, further in view of Herdeman (5,658,607), further in view of Badran (3,450,542), Scolaro (Ep 752,378), Badran et al (3,450,544), De Moor (6,013,293), Anderson (4,842,875), Antoon (5,045,331), and Shimizu (Jp 57-94244).

In regard to claim 1, Cummin et al ('333) discloses that applicant is not the first to store green bananas in a sealed container that is permeable to O₂ and CO₂ (and allow the bananas to ripen in the sealed container). As applicants admission of the prior art, Badran, Scolaro, Badran et al, De Moor, Anderson and Antoon attest to, the application of gas permeable packages to modified atmospheres to slow down ripening and increase storage life of produce including bananas is notoriously old. The permeability of these packages are such that they are more permeable to O₂ than to CO₂ so as to form or maintain atmospheres within the packages, when coupled with the respiration rate, weight of produce and other known variables, that are higher than atmospheric in their CO₂ concentration and lower than atmospheric in their O₂ concentration. Claim 1 further recites that the sealed package is stored in a controlled atmosphere of O₂ and CO₂. This phrase appears to mean that the atmosphere surrounding the sealed package is in the recited concentration range. Applicant's admission of the prior art as

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further evidenced by the art taken as a whole including e.g. Herdeman ('607) discloses controlled atmosphere storage of produce is conventional. It is noted that the recited concentration ranges read on the disclosed amount of O₂ generally recognized by the art take as a whole as levels of oxygen for good storage life. To store the sealed oxygen permeable package in the controlled atmosphere is seen to have been obvious in view of the art taken as a whole with its teaching of reducing oxygen upon initiation of ripening (e.g. Herdeman). Note too, whether the ambient atmosphere is air or reduced oxygen air, the breathable package would still allow sufficient gas transfer. In regard to claims 2-4, the art taken as a whole clearly teaches that the variables in produce storage such as oxygen and temperature can be manipulated to achieve optimal results but that lower oxygen and higher carbon dioxide concentrations relative to atmospheric is necessary for all produce. In regard to claim 5, applicants admission of the prior art as further evidenced by Shimizu discloses that the use of exogenous ethylene ripening agents are conventional in the banana storage art and to modify Cummin et al and add such an agent for its art recognized and applicants intended function would have been obvious. In regard to claim 7, Shimizu adds the agent to the package. In regard to claims 8-10, as noted above, the art taken as a whole teach weight of produce, temperature, and permeability are all interrelated variables in modified atmosphere produce packaging and to select particular values for these variables would have been an obvious matter of routine determination in view of the art taken as a whole. Claims 11-18 are rejected for the reasons given above. In regard to claims 19-21, the art taken as a whole teaches shipping sealed containers with ethylene would have been obvious (e.g. Shimizu) and the use of microporous polymeric film with a polymeric coating thereon for providing a "pathway" for O₂, CO₂ and ethylene – i.e. a breathable sheet – is shown to have been obvious by

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DeMoor. Claims 19-21 are also rejected employing Shimizu as the primary reference to teach both a shipping container containing sealed packages and the sealed package itself that have bananas passed their climacteric and wherein the packaging is permeable to the gases of respiration and wherein the packaging atmosphere includes exogenous ethylene and wherein the remainder of the art taken as a whole can be relied on as above to teach the manipulation of the well known produce storage variables of weight, permeability, etc.

Applicant has filed a series of IDS statements with a multitude of references including US, foreign and many publications. To attempt to recover all of these references from the scanned application is seen to be a serious burden. Applicant is Kkindly requested to have a set of these references personally delivered to the examiner so that they may be thoroughly perused and be available for any future communication. Applicant is thanked in advance.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Weinstein whose telephone number is (571) 272-1410. The examiner can normally be reached on Monday thru Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Weinstein/LR
March 18, 2004


STEVE WEINSTEIN
PRIMARY EXAMINER 1761
3/25/04